

• **ATLAS** RESIN
• **PROPPANTS**

COPY

January 16, 2013

Compliance Data -- Wisconsin
Air and Radiation Division
US EPA
77 W. Jackson Street
Chicago, IL 60604

Dear Sirs,

Please find enclosed a copy of our Certification of Compliance for the period of January 1, 2012 through December 31, 2012, as required under our permit No. 627005280-P10, Part I, Item ZZZ, Number 3.b.(2).

If you have any questions regarding this information, please feel free to contact me as listed below.

Regards,



Erica Grant
Operations Manager
Atlas Resin Proppants, LLC
Taylor, WI
egrant@atlasresinproppants.com
715-662-2200, ext. 231

COPY

State of Wisconsin
Department of Natural Resources
Bureau of Air Management
ar.wi.gov

Air Operation Permit Compliance Certification
Form 4530-170 (R 10/10)

Notice: Under ss. NR 407.09(4)(a)3. and 439.03(1)(c), Wis. Adm. Code, all sources issued an air operation permit by the Wisconsin Department of Natural Resources must submit an annual (or more frequent) certification of compliance with all operation permit terms and conditions over the reporting period specified in the permit. You may use this form to submit your compliance certification to the Department, and to EPA Region V. Please note that compliance certifications must be signed by a responsible official, as defined in NR 400.02(136), Wis. Adm. Code. Please retain records and all other material information used to certify compliance with your air operation permit for Department review. Use of this Form is voluntary. Personally identifiable information collected on this Form is unlikely to be used for any purpose other than that for which it was originally collected, but may be provided to requesters as required by Wisconsin's Open Records law (ss. 19.31-19.39, Wis. Stats.).

A.) Facility Information

1) Facility Name **ATLAS RESIN PROPPANTS, LLC**

2) FID: **627005280**

3) a. Permit Number **627005280-P10**

b. Permit Issue Date **JANUARY 3, 2012**

4) Reporting Period Covered by this Certification **JANUARY 1, 2012 thru DECEMBER 31, 2012**

5) FOR PART 70 SOURCES ONLY:

All Part-70 sources must also submit a copy of the compliance certification to the **US EPA-Region V**, in addition to the **appropriate WDNR regional field office**. Addresses are listed in your Part-70 air permit. Please check the following box, if applicable to your facility:

☒ A copy of the Compliance Certification has been submitted to US EPA-Region V.

B.) Facility Compliance Information

6) Check either (a) "CONTINUOUS COMPLIANCE" or (b) "INTERMITTENT COMPLIANCE" below
(Terms "continuous" and "intermittent" compliance are defined in Instructions, page 3 of 4).

a) _____ Facility Was in Continuous Compliance (During the entire reporting period identified in this compliance certification, this facility was in continuous compliance with all conditions specified in the permit identified in this compliance certification. The method used to determine compliance for each condition is the method specified in the permit identified in this compliance certification)

b) ☒ Facility Was in Intermittent Compliance (During the entire reporting period identified in this compliance certification, this facility was in continuous compliance with all conditions specified in the permit identified in this compliance certification, **EXCEPT** for the deviations identified on the attached deviation report. The method used to determine compliance for each condition is the method specified in the permit identified in this compliance certification, unless otherwise indicated and described in the enclosed deviation report.)

NOTE: If you select this option, you must complete and attach the Air Operation Permit Deviation Summary Report, in which you list deviations from any conditions of the permit for the reporting period covered by this Compliance Certification.

COPY

Air Operation Permit Compliance Certification

Form 4530-170 (R 10/10)

C.) Alternative Permit Requirements

In certain circumstances where the underlying applicable requirement allows, permits may include a choice of limits and/or standards, alternate operating scenarios, alternate monitoring methods, alternate recordkeeping, and the like. Where the permit includes such options or alternate requirements, the source must specifically identify the permit terms and conditions which applied over the entire reporting period. Many federal MACT standards provide a choice of emission standards and associated monitoring requirements. For example, the pulp and paper MACT (40 CFR part 63 subpart S) requires certain control devices to either reduce total hazardous air pollutant emissions by weight, or by volume, or through the use of a thermal oxidizer operating under certain parameters, or through other specified means.

7) If the facility operated under alternative permit requirements for all or part of the reporting period covered by this compliance certification, please identify the permit condition that describes the alternative permit requirements, list the emission unit operated according to these requirements, and list the begin and end dates during which the emission unit was operated according to these requirements: (Add additional pages if necessary)

a) Permit Condition Reference:

b) Emission Unit:

c) Alternative Requirement Begin and End Date:

D.) Facility Compliance Certification

NOTE: A responsible official, as defined in s. NR 400.02 (136), Wis. Adm. Code, must sign this compliance certification. Compliance certifications that are not signed by a responsible official will be returned as incomplete.

I have reviewed this facility's compliance status with respect to ALL air operation permit conditions for the reporting period specified in this compliance certification. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate and complete.

Erica Grant
Signature of Responsible Official

Erica Grant
Typed or Printed Name of Signatory

Operations Manager
Title

1.17.13
Date

For questions concerning compliance certification, contact your regional compliance engineer by phone, via email, or via facsimile.

COPY

Air Operation Permit Deviation Summary Report
Form 4530-171 (R 9/10)

Notice: Deviation Reports are required under s. NR 439.03(1)(b), Wis. Adm. Code. Use of this Table to report deviations is voluntary. Personally Identifiable Information collected on this form is not likely to be used for purposes other than the purpose for which it is being collected. This table may be submitted in conjunction with the Air Operation Permit Compliance Certification to report deviations from permit conditions contained in the Air Operation Permit. Complete items A-C to report deviations. Provide information on each deviation in a separate row of the table. Copy this page as needed to list all deviations for the reporting period specified in this Deviation Summary Report. Personally identifiable information collected on this Form is unlikely to be used for any purpose other than that for which it was originally collected, but may be provided to requesters as required by Wisconsin's Open Records law (ss. 19.31-19.39, Wis. Stats.).

A. Facility Information	
1.) Facility Name ATLAS RESIN PROPPANTS, LLC	2.) FID 627005280
3.) Permit Number 627005280-P10	4.) Permit Issue Date JANUARY 3, 2012
5.) Reporting Period Covered by this Deviation Report JANUARY 1, 2012 thru DECEMBER 31, 2012	

B. Deviation Summary Report						
1.) Permit Condition Reference	2.) Emission Unit	3.) Deviation Period Start and End Dates	4.) Date Deviation Previously Reported to DNR	5.) Deviation Description	6.) Method Used to Identify Deviation	7.) Reason for Deviation and Corrective Action Taken
LXXX.1.(2)(a) (i)	Facility Wide Emissions Limitation	June 22, 2012 thru June 22, 2012	June 25, 2012	Over limit on daily use of hexamethylenetetramine	Daily tracking on the use of hexa indicated 7,622.6 lbs. used or 312.6 lbs. over the permit allowable limit of 7,310 lbs.	3,000 lb. batches were being run with no down time for cleaning during the 24 hour period. This was not normal for this product. Batch sizes were reduced when running the product to prevent future deviations.
	S14 S15 @22	Sept. 12, 2012 Thru Dec. 3, 2012	Sept. 12, 2012	As-built silo filter stacks heights not to that specified in permit	Deviation was discovered during DNR Inspection on Sept. 12, 2012	Silo filter stacks for S14 and S15 (formerly at 46.6 feet) and S22 (formerly at 52.2 feet) were extended to 60 feet above ground level as stated in permit conditions.

COPY

Air Operation Permit Deviation Summary Report
Form 4530-171 (R 9/10)

C. Responsible Official Certification

NOTE: A responsible official, as defined in s. NR 400.02(136), Wis. Adm. Code, must sign this deviation summary report. Deviation summary reports that are not signed by a responsible official will be returned as incomplete.

I have reviewed this facility's Deviation Summary Report. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate and complete.

Erica Grant

Signature of Responsible Official

Erica Grant

Typed or Printed Name of Signatory

1/17/13

Date

Operations Manager

Title

• **ATLAS** RESIN
• **PROPPANTS**
•

COPY

July 19, 2012

Mr. Marty Sellers
Air Management Compliance Officer
Wisconsin Department of Natural Resources
3550 Mormon Coulee Road
La Crosse, WI 54601

Re: Air Monitoring Reporting Requirement for the period of January 1 through June 30, 2012

Dear Mr. Sellers,

This letter serves to comply with air monitoring reporting requirements with regard to Permit No. 627005280-P10 for our Taylor, WI facility. In accordance with Part 1, Item ~~ZZZ~~, Number 3.a.(1) attached in Appendix A and B are a summary of our CAM Plan and monitoring data required by the permit for Tower A and Tower B respectively for the period of January 1, 2012 through June 30, 2012.

Appendix C of this letter includes a completed Permit Deviation Summary Report for the minor permit deviation we experienced on June 22 during the above mentioned reporting period. Notification of this deviation was made to you via phone conversation on June 25 and followed by written documentation of the deviation on the same date. A copy of this letter has also been included in Appendix C.

If there is any other information we can provide, please don't hesitate to contact me at the number listed below.

Regards,

Erica Grant

Erica Grant
Operations Manager
Atlas Resin Proppants, LLC

P.O. Box 100 • N7532 County Road P • Taylor, WI 54659 • (715) 662-2200 • FAX (715) 662-2424

ARP-Taylor01234

• **ATLAS** RESIN
• **PROPPANTS**

COPY

Mr. Marty Sellers
Wisconsin Department of Natural Resources
Air Management
3550 Mormon Coulee Road
LaCrosse, WI 54601

RE: Permit Deviation -- 627005280-P10, Part I, XXX.1.a(2)(a)(i)

Dear Mr. Sellers,

This letter is to inform WDNR of a temporary permit deviation that occurred at our Taylor, WI facility on June 22, 2012.

On Friday morning we discovered that we exceeded our limit for combined tower hexa usage as stated in the permit condition listed above. Our combined hexa use was 7,622.6 lbs, or 312.6 lbs over the limit for Towers A & B combined. This was due to an exceptional run time in both towers and due to running 3000 lb batches of our PRC-P product. We have never experienced both towers running this particular product or batch size without down time for mixer cleaning, which always keeps us within our operating limits. The problem was immediately corrected by changing the type of product being made in Tower A.

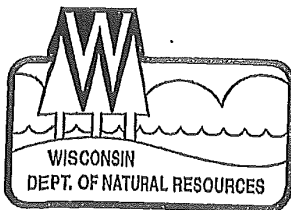
In the future, on the rare occasion we manufacture this product in both towers we will be reducing the batch size in order to maintain compliance within our permit limits.

Based on phone conversation you had with Dawn Tiffany earlier today, I trust this letter serves as adequate written notification and correction of this issue. We will be making note of non-compliance in our upcoming Air Monitoring Report, which is due August 14th, 2012. Please feel free to contact me if you have any further questions.

Regards,

Erica R. Grant

Erica R. Grant
Production Manager



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott Walker, Governor
Cathy Stepp, Secretary

West Central Region Air Program
LaCrosse Area Office
3550 Mormon Coulee Road
LaCrosse, Wisconsin 54601
Fax 608-785-9990

September 27, 2012

COPY

FILE CODE: 4530
FID #: 627005280

Erica Grant, Operations Manager
Atlas Resin Proppants, LLC
P.O. Box 100
Taylor, WI 54659

Subject: Letter of Noncompliance

Dear Ms. Grant:

The Department of Natural Resources has reason to believe that the Atlas Resin Proppants (Atlas) facility in Taylor, Wisconsin, is not in compliance with Wisconsin air pollution control rules.

Air pollution control operation permit #627005280-P10 was issued to Atlas on January 3, 2012. Permit conditions I.A.1.a.(2)(a), I.B.1.a.(2)(a), and I.C.1.a.(2)(a), require that silo filter stacks S14, S15, and S22 be at least sixty feet above ground level. Documentation provided by Atlas to the department on September 12, 2012, indicates that stacks S14 and S15 are 46.6 feet and S22 is 52.2 feet above ground level.

Based on this information, the department believes that the facility is not operating in compliance with these permit conditions.

The department requests that Atlas respond in writing to this Letter of Noncompliance by October 26, 2012, by providing a plan to bring these stacks into compliance.

If you have any questions regarding this matter, please contact me at 608-785-9975.

Sincerely,

Martin Sellers
Air Quality Engineer

cc. Jeff Johnson, Air Supervisor, WCR
Martha Makholm, AM/7
Dawn Tiffany, Atlas Resin Proppants, LLC

• **ATLAS** RESIN
• PROPPANTS

COPY

December 3, 2012

Mr. Martin Sellers, P.E.
Air Quality Engineer
Wisconsin Department of Natural Resources
West Central Region – La Crosse
3550 Mormon Coulee Road
La Crosse, WI 54601

Subject: Atlas Resin Proppants, LLC (FID #627005280)
Response to Letter of Noncompliance, Dated: 9/27/12

Dear Mr. Sellers:

We have resolved the matter raised in the Letter of Noncompliance issued to Atlas Resin Proppants in Taylor, WI on 9-27-12. Specifically, as discussed in a November 30, 2012, e-mail, the silo filter stacks for S14, S15 (formerly 46.6 feet) and S22 (formerly 52.2 feet) have been extended to 60 feet above ground level as stated in our operations permit #627005280-P10.

The drawings that reflect these changes are located in Attachment 1.

Your time and consideration of this matter are much appreciated, and we look forward to your written response. Should you have any questions, please call our environmental consultant, Mr. Joe Liello (TRC Environmental Corporation) at 262-901-2135, or me at 715-662-2200, ext. 231.

Sincerely,



Erica R. Grant
Operations Manager
Atlas Resin Proppants, LLC

Enclosures

• **ATLAS** RESIN
• **PROPPANTS**

COPY

December 3, 2012

Mr. Martin Sellers, P.E.
Air Quality Engineer
Wisconsin Department of Natural Resources
West Central Region – La Crosse
3550 Mormon Coulee Road
La Crosse, WI 54601

Subject: Atlas Resin Proppants, LLC (FID #627005280)
Response to Letter of Noncompliance, Dated: 9/27/12

Dear Mr. Sellers:

We have resolved the matter raised in the Letter of Noncompliance issued to Atlas Resin Proppants in Taylor, WI on 9-27-12. Specifically, as discussed in a November 30, 2012, e-mail, the silo filter stacks for S14, S15 (formerly 46.6 feet) and S22 (formerly 52.2 feet) have been extended to 60 feet above ground level as stated in our operations permit #627005280-P10.

The drawings that reflect these changes are located in Attachment 1.

Your time and consideration of this matter are much appreciated, and we look forward to your written response. Should you have any questions, please call our environmental consultant, Mr. Joe Liello (TRC Environmental Corporation) at 262-901-2135, or me at 715-662-2200, ext. 231.

Sincerely,



Erica R. Grant
Operations Manager
Atlas Resin Proppants, LLC

Enclosures



July 19, 2012

Mr. Marty Sellers
Air Management Compliance Officer
Wisconsin Department of Natural Resources
3550 Mormon Coulee Road
La Crosse, WI 54601

Re: Air Monitoring Reporting Requirement for the period of January 1 through June 30, 2012

Dear Mr. Sellers,

This letter serves to comply with air monitoring reporting requirements with regard to Permit No. 627005280-P10 for our Taylor, WI facility. In accordance with Part 1, Item ZZZ, Number 3.a.(1) attached in Appendix A and B are a summary of our CAM Plan and monitoring data required by the permit for Tower A and Tower B respectively for the period of January 1, 2012 through June 30, 2012.

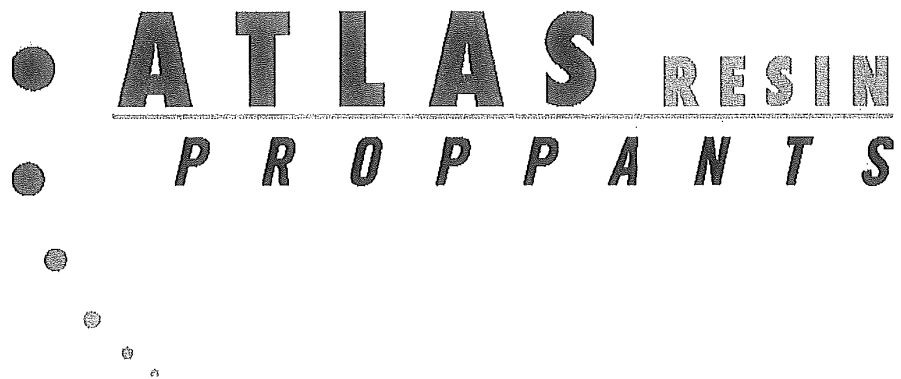
Appendix C of this letter includes a completed Permit Deviation Summary Report for the minor permit deviation we experienced on June 22 during the above mentioned reporting period. Notification of this deviation was made to you via phone conversation on June 25 and followed by written documentation of the deviation on the same date. A copy of this letter has also been included in Appendix C.

If there is any other information we can provide, please don't hesitate to contact me at the number listed below.

Regards,

A handwritten signature in black ink that reads "Erica Grant".

Erica Grant
Operations Manager
Atlas Resin Proppants, LLC



APPENDIX A

Tower A
CAM Plan Summary
Monitoring Date

Taylor, WI Facility

Table 1
Monitoring Approach for Baghouse C20

	INDICATOR NO. 1
I. Indicator Measurement Approach	Pressure Drop Measure pressure drop across baghouse with Magnehelic 0-15" H ₂ O differential pressure gauge.
II. Indicator Range	Pressure drop across baghouse control device between 2 and 7 inches water column.
III. Performance Criteria	
A. Data Representativeness	Static pressure is measured at the baghouse inlet and exhaust. The accuracy of the device is +/- 2%.
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.
C. QA/QC Practices and Criteria	Trained personnel collect and record data and calibrate monitor.
D. Monitoring Frequency	Once every 8 hours of operation
E. Data Collection Procedures	Results of pressure drop are recorded in log, "Environmental Controls Inspection."
F. Averaging Period	NA

Table 1
Monitoring Approach for Scrubber C50

	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3
I. Indicator Measurement Approach	Pressure Drop	Scrubber Liquid Flow	Scrubber Liquid pH
	Measure pressure drop across scrubber and demister with Capsuhelic 0-20" and Magnehelic 0-1" H ₂ O pressure gauges.	Measure flow to wet scrubber with Dynasonics Ultrasonic flowmeters.	Measure pH of wet scrubber absorbing liquid with a Thermo Orion 3 Star pH probe.
II. Indicator Range	Pressure drop across the scrubber and demister between 8 and 17 inches of H ₂ O.	Liquid flow of at least 45 gpm.*	pH between 9.5 and 10.2
III. Performance Criteria	<p>A. Data Representativeness The monitoring system consists of a differential pressure transducer, which compares the pressure in the duct prior to the venturi to the pressure in the duct following the demister. The accuracy of the scrubber gauge is +/- 3%, and +/- 2% for the demister gauge.</p> <p>B. Verification of Operational Status Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.</p> <p>C. QA/QC Practices and Criteria Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations. Liquid is drained when necessary.</p> <p>D. Monitoring Frequency Once every 8 hours of operation.</p> <p>E. Data Collection Procedures Results are recorded in log, "Environmental Controls Inspection."</p> <p>F. Averaging Period NA</p>		
	The monitoring system consists of a differential pressure transducer, which compares the pressure in the duct prior to the venturi to the pressure in the duct following the demister. The accuracy of the scrubber gauge is +/- 3%, and +/- 2% for the demister gauge.	Flow is measured prior to spray nozzles following a gate valve. The accuracy of the device is +/- 3%. The repeatability of the device is +/- 1%.	The pH of a sample taken from the sludge tank is measured in the laboratory. The accuracy of the probe is +/- 0.002.
	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated as needed.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated as needed.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated daily.
	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations. Liquid is drained when necessary.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations and cleaned and drained monthly.
	Once every 8 hours of operation.	Once every 8 hours of operation.	Once every 8 hours of operation.
	Results are recorded in log, "Environmental Controls Inspection."	Results are recorded in log, "Environmental Controls Inspection."	Results are recorded in log, "Environmental Controls Inspection."
	NA	NA	NA



APPENDIX B

Tower B
CAM Plan Summary
Monitoring Date

Taylor, WI Facility

Table 1
Monitoring Approach for Baghouse C120

	INDICATOR NO. 1
I. Indicator	Pressure Drop
Measurement Approach	Measure pressure drop across baghouse with Magnehelic 0-15" H ₂ O differential pressure gauge.
II. Indicator Range	Pressure drop across baghouse control device between 2 and 7 inches water column.
III. Performance Criteria	
A. Data Representativeness	Static pressure is measured at the baghouse inlet and exhaust. The accuracy of the device is +/- 2%.
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.
C. QA/QC Practices and Criteria	Trained personnel collect and record data and calibrate monitor.
D. Monitoring Frequency	Once every 8 hours of operation
E. Data Collection Procedures	Results of pressure drop are recorded in log, "Environmental Controls Inspection."
F. Averaging Period	NA

Table 2
Monitoring Approach for Scrubber C150

	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3
I. Indicator Measurement Approach	Pressure drop	Scrubber Liquid Flow	Scrubber Liquid pH
	Measure pressure drop across scrubber and demister with Capsuhelic 0-20" and Magnehelic 0-1" H ₂ O pressure gauges.	Measure flow to scrubber with Dynasonics Ultrasonic flowmeters.	Measure pH of scrubber liquid with a Thermo Orion 3 Star pH probe.
II. Indicator Range	Pressure drop across the scrubber and demister between 8 to 17 inches.	Liquid flow of at least 45 gpm.*	pH between 9.5 and 10.2.
III. Performance Criteria	The monitoring system consists of a differential pressure transducer, which compares the pressure in the duct prior to the venturi to the pressure in the duct following the demister. The accuracy of the scrubber gauge is +/- 3%, and +/- 2% for the demister gauge.	Flow is measured prior to spray nozzles following a gate valve. The accuracy of the device is +/- 3%. The repeatability of the device is +/- 1%.	The pH of a sample taken from the sludge tank is measured in the laboratory. The accuracy of the probe is +/- 0.002.
A. Data Representativeness	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated as needed.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated daily.
B. Verification of Operational Status	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations. Liquid is drained when necessary.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations and cleaned and drained monthly.
C. QA/QC Practices and Monitoring Frequency	Once every 8 hours of operation. Results are recorded in log, "Environmental Control's Inspection."	Once every 8 hours of operation. Results are recorded in log, "Environmental Control's Inspection."	Once every 8 hours of operation. Results are recorded in log, "Environmental Control's Inspection."
E. Data Collection Procedures	NA	NA	NA
F. Averaging Period	NA	NA	NA



APPENDIX C

Permit Deviation Summary Report Notification of Deviation

Taylor, WI Facility

Air Operation Permit Deviation Summary Report
Form 4530-171 (R 9/10)

Notice: Deviation Reports are required under s. NR 439.03(1)(b), Wis. Adm. Code. Use of this Table to report deviations is voluntary. Personally identifiable information collected on this form is not likely to be used for purposes other than the purpose for which it is being collected. This table may be submitted in conjunction with the Air Operation Permit Compliance Certification to report deviations from permit conditions contained in the Air Operation Permit. Complete items A-C to report deviations. Provide information on each deviation in a separate row of the table. Copy this page as needed to list all deviations for the reporting period specified in this Deviation Summary Report. Personally identifiable information collected on this Form is unlikely to be used for any purpose other than that for which it was originally collected, but may be provided to requesters as required by Wisconsin's Open Records law (ss. 19.31-19.39, Wis. Stats.).

A.) Facility Information

1.) Facility Name	2.) FID
Atlas Resin Proppants, LLC	627005280
3.) Permit Number	4.) Permit Issue Date
627005280-P10	January 3, 2012
5.) Reporting Period Covered by this Deviation Report	
January 1 thru June 30, 2012 (Air Monitoring Reporting requirement)	

B.) Deviation Summary Report

1.) Permit Condition Reference	2.) Emission Unit	3.) Deviation Period Start and End Dates	4.) Date Deviation Previously Reported to DNR	5.) Deviation Description	6.) Method Used to Identify Deviation	7.) Reason for Deviation and Corrective Action Taken
I.XXX.1.(2)(a) (i)	Facility Wide Emissions Limitation	June 22, 2012 thru June 22, 2012	June 25, 2012	Over limit on daily use of hexamethylenetetramine	Daily tracking on the use of hexa indicated 7622.6 lbs. used or 312.6 lbs. over the permit allowable limit of 7,310 lbs.	3,000 lb. batches were being run with no down time during the 24 hour period for cleaning. This is not normal for this product. Batch sizes have been reduced when running this product to prevent future deviations.

Air Operation Permit Deviation Summary Report
Form 4530-171 (R 9/10)

C.) Responsible Official Certification

NOTE: A responsible official, as defined in s. NR 400.02(136), Wis. Adm. Code, must sign this deviation summary report. Deviation summary reports that are not signed by a responsible official will be returned as incomplete.

I have reviewed this facility's Deviation Summary Report. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate and complete.

Erica R. Grant
Signature of Responsible Official

Erica R. Grant
Typed or Printed Name of Signatory

Operations Manager
Title

7/19/12
Date



COPY

Mr. Marty Sellers
Wisconsin Department of Natural Resources
Air Management
3550 Mormon Coulee Road
LaCrosse, WI 54601

RE: Permit Deviation – 627005280-P10, Part I, XXX.1.a(2)(a)(i)

Dear Mr. Sellers,

This letter is to inform WDNR of a temporary permit deviation that occurred at our Taylor, WI facility on June 22, 2012.

On Friday morning we discovered that we exceeded our limit for combined tower hexa usage as stated in the permit condition listed above. Our combined hexa use was 7,622.6 lbs, or 312.6 lbs over the limit for Towers A & B combined. This was due to an exceptional run time in both towers and due to running 3000 lb batches of our PRC-P product. We have never experienced both towers running this particular product or batch size without down time for mixer cleaning, which always keeps us within our operating limits. The problem was immediately corrected by changing the type of product being made in Tower A.

In the future, on the rare occasion we manufacture this product in both towers we will be reducing the batch size in order to maintain compliance within our permit limits.

Based on phone conversation you had with Dawn Tiffany earlier today, I trust this letter serves as adequate written notification and correction of this issue. We will be making note of non-compliance in our upcoming Air Monitoring Report, which is due August 14th, 2012. Please feel free to contact me if you have any further questions.

Regards,

A handwritten signature in cursive script that reads "Erica R. Grant".

Erica R. Grant
Production Manager

• **ATLAS** RESIN
• **PROPPANTS**

COPY

January 16, 2013

Mr. Martin F. Sellers, P.E.
Air Quality Engineer
Wisconsin Department of Natural Resources
West Central Region – LaCrosse
3550 Mormon Coulee Road, Room 104
LaCrosse, WI 54601

Dear Mr. Sellers,

This letter serves to comply with air monitoring reporting requirements with regard to Permit No. 627005280-P10 for our Taylor, WI facility. In accordance with Part 1, Item ZZZ, Number 3.a.(1) attached in Appendix A and B are a summary of our CAM Plan and monitoring data required by the permit for Tower A and Tower B respectively for the period of July 1, 2012 through December 31, 2012.

Also find attached in Appendix C our Annual Certification of Compliance as required under Part 1, Item ZZZ, Number 3.a.(2). Appendix C also includes an Air Operation Permit Deviation Summary Report that addresses a minor permit deviation we experienced on June 22, 2012, and a Letter of Non-Compliance we received from you dated September 27, 2012. Both deviations were corrected and copies of those correspondence (dated June 25, 2012 and December 3, 2012 respectively) are also attached.

If you have any questions regarding the enclosed information, please do not hesitate to contact me at the number listed below.

Regards,



Erica Grant
Operations Manager
Atlas Resin Proppants, LLC
715-662-2200, ext. 231

• **ATLAS** **RESIN**
• **P R O P P A N T S**
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Appendix A
Taylor Manufacturing Facility

Tower A
CAM Plan Summary
Monitoring Data

Table 1
Monitoring Approach for Baghouse C20

	INDICATOR NO. 1
I. Indicator	Pressure Drop
Measurement Approach	Measure pressure drop across baghouse with Magnehelic 0-15" H ₂ O differential pressure gauge.
II. Indicator Range	Pressure drop across baghouse control device between 1 and 8 inches water column.
III. Performance Criteria	
A. Data Representativeness	Static pressure is measured at the baghouse inlet and exhaust. The accuracy of the device is +/- 2%.
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.
C. QA/QC Practices and Criteria	Trained personnel collect and record data and calibrate monitor.
D. Monitoring Frequency	Once every 8 hours of operation
E. Data Collection Procedures	Results of pressure drop are recorded in log, "Environmental Controls Inspection."
F. Averaging Period	NA

Table 1
Monitoring Approach for Scrubber C50

Indicator	INDICATOR NO. 1		INDICATOR NO. 2		INDICATOR NO. 3	
	Measurement Approach		Scrubber Liquid Flow		Scrubber Liquid pH	
II. Indicator Range	Pressure drop across scrubber and demister with Capsuhelic 0-20" and Magnehelic 0-1" H ₂ O pressure gauges.		Visual inspection to confirm return flow to the sludge tank, coupled with monitoring and recording the motor power of the scrubber liquor recirculation pump.		Measure pH of wet scrubber absorbing liquid with a Thermo Orion 3 Star pH probe.	
	Pressure drop across the scrubber and demister between 8 and 17 inches of H ₂ O.		Flow of scrubber liquor		pH between 9.5 and 10.2	
III. Performance Criteria						
A. Data Representativeness	The monitoring system consists of a differential pressure transducer, which compares the pressure in the duct prior to the venturi to the pressure in the duct following the demister. The accuracy of the scrubber gauge is +/- 3%, and +/- 2% for the demister gauge.		Flow of scrubber liquor is confirmed visually at the point of entry into the sludge tank. Recirculation pump amps are monitored via digital display at the point of process control.		The pH of a sample taken from the sludge tank is measured in the laboratory. The accuracy of the probe is +/- 0.002.	
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.		Recirculation pump maintained in accordance with the manufacturer's recommendations.		Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year.	
C. QA/QC Practices and Criteria	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations. Liquid is drained when necessary.		Trained personnel perform visual inspections. Equipment is maintained according to manufacturer's recommendations.		Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations and cleaned and drained monthly.	
D. Monitoring Frequency	Once every 8 hours of operation.		Once every 8 hours of operation.		Once every 8 hours of operation.	
E. Data Collection Procedures	Results are recorded in log, "Environmental Controls Inspection."		Results are recorded in log, "Environmental Controls Inspection."		Results are recorded in log, "Environmental Controls Inspection."	
F. Averaging Period	NA		NA		NA	

ATLAS RESIN
PROPPANTS

Appendix B
Taylor Manufacturing Facility

Tower B
CAM Plan Summary
Monitoring Data

Table 1
Monitoring Approach for Baghouse C120

	INDICATOR NO. 1
I. Indicator Measurement Approach	Pressure Drop Measure pressure drop across baghouse with Magnehelic 0-15" H ₂ O differential pressure gauge.
II. Indicator Range	Pressure drop across baghouse control device between 1 and 8 inches water column.
III. Performance Criteria	
A. Data Representativeness	Static pressure is measured at the baghouse inlet and exhaust. The accuracy of the device is +/- 2%.
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.
C. QA/QC Practices and Criteria	Trained personnel collect and record data and calibrate monitor.
D. Monitoring Frequency	Once every 8 hours of operation
E. Data Collection Procedures	Results of pressure drop are recorded in log, "Environmental Controls Inspection."
F. Averaging Period	NA

Table 2
Monitoring Approach for Scrubber C150

Indicator	INDICATOR NO. 1		INDICATOR NO. 2		INDICATOR NO. 3	
	Measurement Approach		Scrubber Liquid Flow		Scrubber Liquid pH	
II. Indicator Range	Pressure drop across scrubber and demister with Capsuhelic 0-20" and Magnehelic 0-1" H ₂ O pressure gauges.		Visual inspection to confirm return flow to the sludge tank, coupled with monitoring and recording the motor power of the scrubber liquor recirculation pump.		Measure pH of scrubber liquid with a Thermo Orion 3 Star pH probe.	
	Pressure drop across the scrubber and demister between 8 to 17 inches.		Flow of scrubber liquor		pH between 9.5 and 10.2.	
III. Performance Criteria						
A. Data Representativeness	The monitoring system consists of a differential pressure transducer, which compares the pressure in the duct prior to the venturi to the pressure in the duct following the demister. The accuracy of the scrubber gauge is +/- 3%, and +/- 2% for the demister gauge.		Flow of scrubber liquor is confirmed visually at the point of entry into the sludge tank. Recirculation pump amps are monitored via digital display at the point of process control.		The pH of a sample taken from the sludge tank is measured in the laboratory. The accuracy of the probe is +/- 0.002.	
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.		Recirculation pump maintained in accordance with the manufacturer's recommendations.		Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated daily.	
C. QA/QC Practices and Criteria	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations. Liquid is drained when necessary.		Trained personnel perform visual inspections. Equipment is maintained according to manufacturer's recommendations.		Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations and cleaned and drained monthly.	
D. Monitoring Frequency	Once every 8 hours of operation.		Once every 8 hours of operation.		Once every 8 hours of operation.	
E. Data Collection Procedures	Results are recorded in log, "Environmental Control's Inspection."		Results are recorded in log, "Environmental Control's Inspection."		Results are recorded in log, "Environmental Control's Inspection."	
F. Averaging Period	NA		NA		NA	



Appendix C

Taylor Manufacturing Facility

Air Operation Permit Compliance Certification
Air Operation Permit Deviation Summary Report

Air Operation Permit Compliance Certification
Form 4530-170 (R 10/10)

Notice: Under ss. NR 407.09(4)(a)3. and 439.03(1)(c), Wis. Adm. Code, all sources issued an air operation permit by the Wisconsin Department of Natural Resources must submit an annual (or more frequent) certification of compliance with all operation permit terms and conditions over the reporting period specified in the permit. You may use this form to submit your compliance certification to the Department, and to EPA Region V. Please note that compliance certifications must be signed by a responsible official, as defined in NR 400.02(136), Wis. Adm. Code. Please retain records and all other material information used to certify compliance with your air operation permit for Department review. Use of this Form is voluntary. Personally identifiable information collected on this Form is unlikely to be used for any purpose other than that for which it was originally collected, but may be provided to requesters as required by Wisconsin's Open Records law (ss. 19.31-19.39, Wis. Stats.).

A.) Facility Information

1) Facility Name **ATLAS RESIN PROPPANTS, LLC**

2) FID: **627005280**

3) a. Permit Number **627005280-P10**

b. Permit Issue Date **JANUARY 3, 2012**

4) Reporting Period Covered by this Certification **JANUARY 1, 2012 thru DECEMBER 31, 2012**

5) FOR PART 70 SOURCES ONLY:

All Part-70 sources must also submit a copy of the compliance certification to the **US EPA-Region V**, in addition to the appropriate **WDNR regional field office**. Addresses are listed in your Part-70 air permit. Please check the following box, if applicable to your facility:

☒ A copy of the Compliance Certification has been submitted to US EPA-Region V.

B.) Facility Compliance Information

6) Check either (a) "CONTINUOUS COMPLIANCE" or (b) "INTERMITTENT COMPLIANCE" below
(Terms "continuous" and "intermittent" compliance are defined in Instructions, page 3 of 4).

a) _____ Facility Was in Continuous Compliance (During the entire reporting period identified in this compliance certification, this facility was in **continuous** compliance with all conditions specified in the permit identified in this compliance certification. The method used to determine compliance for each condition is the method specified in the permit identified in this compliance certification)

b) ☒ Facility Was in Intermittent Compliance (During the entire reporting period identified in this compliance certification, this facility was in continuous compliance with all conditions specified in the permit identified in this compliance certification, **EXCEPT** for the deviations identified on the attached deviation report. The method used to determine compliance for each condition is the method specified in the permit identified in this compliance certification, unless otherwise indicated and described in the enclosed deviation report.)

NOTE: If you select this option, you must complete and attach the Air Operation Permit Deviation Summary Report, in which you list deviations from any conditions of the permit for the reporting period covered by this Compliance Certification.

Air Operation Permit Compliance Certification
Form 4530-170 (R 10/10)

C.) Alternative Permit Requirements

In certain circumstances where the underlying applicable requirement allows, permits may include a choice of limits and/or standards, alternate operating scenarios, alternate monitoring methods, alternate recordkeeping, and the like. Where the permit includes such options or alternate requirements, the source must specifically identify the permit terms and conditions which applied over the entire reporting period. Many federal MACT standards provide a choice of emission standards and associated monitoring requirements. For example, the pulp and paper MACT (40 CFR part 63 subpart S) requires certain control devices to either reduce total hazardous air pollutant emissions by weight, or by volume, or through the use of a thermal oxidizer operating under certain parameters, or through other specified means.

7) If the facility operated under alternative permit requirements for all or part of the reporting period covered by this compliance certification, please identify the permit condition that describes the alternative permit requirements, list the emission unit operated according to these requirements, and list the begin and end dates during which the emission unit was operated according to these requirements: (Add additional pages if necessary)

a) Permit Condition Reference:	b) Emission Unit:	c) Alternative Requirement Begin and End Date:

D.) Facility Compliance Certification

NOTE: A responsible official, as defined in s. NR 400.02 (136), Wis. Adm. Code, must sign this compliance certification. Compliance certifications that are not signed by a responsible official will be returned as incomplete.

I have reviewed this facility's compliance status with respect to ALL air operation permit conditions for the reporting period specified in this compliance certification. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate and complete.

Erica Grant
Signature of Responsible Official

Erica Grant
Typed or Printed Name of Signatory

Operations Manager
Title

1.17.13
Date

For questions concerning compliance certification, contact your regional compliance engineer by phone, via email, or via facsimile.

Air Operation Permit Deviation Summary Report

Form 4530-171 (R 9/10)

Notice: Deviation Reports are required under s. NR 439.03(1)(b), Wis. Adm. Code. Use of this Table to report deviations is voluntary. Personally identifiable information collected on this form is not likely to be used for purposes other than the purpose for which it is being collected. This table may be submitted in conjunction with the Air Operation Permit Compliance Certification to report deviations from permit conditions contained in the Air Operation Permit. Complete items A-C to report deviations. Provide information on each deviation in a separate row of the table. Copy this page as needed to list all deviations for the reporting period specified in this Deviation Summary Report. Personally identifiable information collected on this Form is unlikely to be used for any purpose other than that for which it was originally collected, but may be provided to requesters as required by Wisconsin's Open Records law (ss. 19.31-19.39, Wis. Stats.).

A.) Facility Information			
1.) Facility Name	2.) FID		
ATLAS RESIN PROPPANTS, LLC	627005280		
3.) Permit Number	4.) Permit Issue Date		
627005280-P10	JANUARY 3, 2012		
5.) Reporting Period Covered by this Deviation Report			
JANUARY 1, 2012 thru DECEMBER 31, 2012			

B.) Deviation Summary Report						
1.) Permit Condition Reference	2.) Emission Unit	3.) Deviation Period Start and End Dates	4.) Date Deviation Previously Reported to DNR	5.) Deviation Description	6.) Method Used to Identify Deviation	7.) Reason for Deviation and Corrective Action Taken
LXXX.1.(2)(a) (f)	Facility Wide Emissions Limitation	June 22, 2012 thru June 22, 2012	June 25, 2012	Over limit on daily use of hexamethylenetetramine	Daily tracking on the use of hexa indicated 7,622.6 lbs. used or 312.6 lbs. over the permit allowable limit of 7,310 lbs.	3,000 lb. batches were being run with no down time for cleaning during the 24 hour period. This was not normal for this product. Batch sizes were reduced when running the product to prevent future deviations.
LA.1.a.(2)(a) LB.1.a.(2)(a) LC.1.a.(2)(a)	S14 S15 @22	Sept. 12, 2012 Thru Dec. 3, 2012	Sept. 12, 2012	As-built silo filter stacks heights not to that specified in permit	Deviation was discovered during DNR Inspection on Sept. 12, 2012	Silo filter stacks for S14 and S15 (formerly at 46.6 feet) and S22 (formerly at 52.2 feet) were extended to 60 feet above ground level as stated in permit conditions.

Air Operation Permit Deviation Summary Report
Form 4530-171 (R 9/10)

C) Responsible Official Certification

NOTE: A responsible official, as defined in s. NR 400.02(136), Wis. Adm. Code, must sign this deviation summary report. Deviation summary reports that are not signed by a responsible official will be returned as incomplete.

I have reviewed this facility's Deviation Summary Report. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate and complete.

Erica Grant

Signature of Responsible Official

Erica Grant

Typed or Printed Name of Signatory

Operations Manager

Title

1/17/13

Date

• **ATLAS** RESIN
• **PROPPANTS**

COPY

July 19, 2012

Mr. Marty Sellers
Air Management Compliance Officer
Wisconsin Department of Natural Resources
3550 Mormon Coulee Road
La Crosse, WI 54601

Re: Air Monitoring Reporting Requirement for the period of January 1 through June 30, 2012

Dear Mr. Sellers,

This letter serves to comply with air monitoring reporting requirements with regard to Permit No. 627005280-P10 for our Taylor, WI facility. In accordance with Part 1, Item ZZZ, Number 3.a.(1) attached in Appendix A and B are a summary of our CAM Plan and monitoring data required by the permit for Tower A and Tower B respectively for the period of January 1, 2012 through June 30, 2012.

Appendix C of this letter includes a completed Permit Deviation Summary Report for the minor permit deviation we experienced on June 22 during the above mentioned reporting period. Notification of this deviation was made to you via phone conversation on June 25 and followed by written documentation of the deviation on the same date. A copy of this letter has also been included in Appendix C.

If there is any other information we can provide, please don't hesitate to contact me at the number listed below.

Regards,

Erica Grant

Erica Grant
Operations Manager
Atlas Resin Proppants, LLC

P.O. Box 100 • N7532 County Road P • Taylor, WI 54659 • (715) 662-2200 • FAX (715) 662-2424

ARP-Taylor01262

• **ATLAS** RESIN
• P R O P P A N T S
•

COPY

Mr. Marty Sellers
Wisconsin Department of Natural Resources
Air Management
3550 Mormon Coulee Road
LaCrosse, WI 54601

RE: Permit Deviation – 627005280-P10, Part I, XXX.1.a(2)(a)(i)

Dear Mr. Sellers,

This letter is to inform WDNR of a temporary permit deviation that occurred at our Taylor, WI facility on June 22, 2012.

On Friday morning we discovered that we exceeded our limit for combined tower hexa usage as stated in the permit condition listed above. Our combined hexa use was 7,622.6 lbs, or 312.6 lbs over the limit for Towers A & B combined. This was due to an exceptional run time in both towers and due to running 3000 lb batches of our PRC-P product. We have never experienced both towers running this particular product or batch size without down time for mixer cleaning, which always keeps us within our operating limits. The problem was immediately corrected by changing the type of product being made in Tower A.

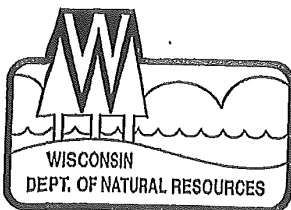
In the future, on the rare occasion we manufacture this product in both towers we will be reducing the batch size in order to maintain compliance within our permit limits.

Based on phone conversation you had with Dawn Tiffany earlier today, I trust this letter serves as adequate written notification and correction of this issue. We will be making note of non-compliance in our upcoming Air Monitoring Report, which is due August 14th, 2012. Please feel free to contact me if you have any further questions.

Regards,



Erica R. Grant
Production Manager



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott Walker, Governor
Cathy Stepp, Secretary

West Central Region Air Program
LaCrosse Area Office
3550 Mormon Coulee Road
LaCrosse, Wisconsin 54601
Fax 608-785-9990

September 27, 2012

COPY

FILE CODE: 4530
FID #: 627005280

Erica Grant, Operations Manager
Atlas Resin Proppants, LLC
P.O. Box 100
Taylor, WI 54659

Subject: Letter of Noncompliance

Dear Ms. Grant:

The Department of Natural Resources has reason to believe that the Atlas Resin Proppants (Atlas) facility in Taylor, Wisconsin, is not in compliance with Wisconsin air pollution control rules.

Air pollution control operation permit #627005280-P10 was issued to Atlas on January 3, 2012. Permit conditions I.A.1.a.(2)(a), I.B.1.a.(2)(a), and I.C.1.a.(2)(a), require that silo filter stacks S14, S15, and S22 be at least sixty feet above ground level. Documentation provided by Atlas to the department on September 12, 2012, indicates that stacks S14 and S15 are 46.6 feet and S22 is 52.2 feet above ground level.

Based on this information, the department believes that the facility is not operating in compliance with these permit conditions.

The department requests that Atlas respond in writing to this Letter of Noncompliance by October 26, 2012, by providing a plan to bring these stacks into compliance.

If you have any questions regarding this matter, please contact me at 608-785-9975.

Sincerely,

Martin Sellers
Air Quality Engineer

cc. Jeff Johnson, Air Supervisor, WCR
Martha Makhholm, AM/7
Dawn Tiffany, Atlas Resin Proppants, LLC

• **ATLAS** RESIN
• PROPPANTS

COPY

December 3, 2012

Mr. Martin Sellers, P.E.
Air Quality Engineer
Wisconsin Department of Natural Resources
West Central Region - La Crosse
3550 Mormon Coulee Road
La Crosse, WI 54601

Subject: Atlas Resin Proppants, LLC (FID #627005280)
Response to Letter of Noncompliance, Dated: 9/27/12

Dear Mr. Sellers:

We have resolved the matter raised in the Letter of Noncompliance issued to Atlas Resin Proppants in Taylor, WI on 9-27-12. Specifically, as discussed in a November 30, 2012, e-mail, the silo filter stacks for S14, S15 (formerly 46.6 feet) and S22 (formerly 52.2 feet) have been extended to 60 feet above ground level as stated in our operations permit #627005280-P10.

The drawings that reflect these changes are located in Attachment 1.

Your time and consideration of this matter are much appreciated, and we look forward to your written response. Should you have any questions, please call our environmental consultant, Mr. Joe Liello (TRC Environmental Corporation) at 262-901-2135, or me at 715-662-2200, ext. 231.

Sincerely,



Erica R. Grant
Operations Manager
Atlas Resin Proppants, LLC

Enclosures

2012 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

627005280 Atlas Resin Proppants, Llc
N7500 County Road P
Taylor

DNR Region: West Central

County: Jackson

SIC Code: 1446 -- INDUSTRIAL SAND

NAICS Code: 212322 -- Industrial Sand Mining

Constr Date:

Employees: 50

Area: 442134 ft2

UTM Zone: 15

UTM X: 649540 m

UTM Y: 4911530 m

Erica Grant
Facility Air Management Contact

7156622200
PO Box 100
Taylor WI 54659
egrant@atlasresinproppants.com

Dan Valiquette
Facility Billing Contact

7156622200
P.O. Box 100
Taylor WI 54659
danvaliquette@atlasresinproppants.com

Erica Grant
Facility Responsible Official

7156622200
PO Box 100
Taylor WI 54659
egrant@atlasresinproppants.com

MARTIN SELLERS
DNR Emission Inventory Contact

6087859975
3550 MORMON COU
LA CROSSE WI 54601
Marty.Sellers@wisconsin.gov

State of Wisconsin Department of Natural Resources

FID: 627005280

Bureau of Air Management

DEVICE AND PROCESS LIST

<u>DEVICE ID</u>	<u>DEVICE CODE</u>	<u>DEVICE NAME</u>	<u>DEVICE CATEGORY</u>
<u>> PROCESS ID</u>	<u>> PROCESS CODE</u>	<u>> PROCESS NAME</u>	<u>> PROCESS DESCRIPTION</u>
C14	BAGHOUSE	Panel Filter	Baghouse/Fabric Filter
--> 00	CONTROLLING	Raw Silo Bin Filters - Tower A & B	Used for collectors
C19	CYCLONE	Cyclone - Tower A and B	Cyclone/Settling Chambers
--> 01	CONTROLLING		Used for collectors
C20	BAGHOUSE	Baghouse - Tower A and B	Baghouse/Fabric Filter
--> 00	CONTROLLING	Baghouse	Used for collectors
C50	SCRUBBER	Wet Scrubber - Tower A & B	Wet Collection Systems
--> 00	CONTROLLING	Wet Scrubber	Used for collectors
F11	GENERIC	Rail Car Unloading - Tower A and B	Miscellaneous
--> 01	GENERIC	UnLoading	Generic Throughput Process
F61	GENERIC	Railcar Loading - Tower A and B	Miscellaneous
--> 01	GENERIC	Railcar Loading - Tower A & B	Generic Throughput Process
P14	SILO	Raw Silos - Tower A and B	Miscellaneous
--> 00	GENERIC	Raw Silos	Generic Throughput Process
P16	CONVEYOR	Conveyors - Tower A & B	Miscellaneous
--> 00	GENERIC	Conveyors	Generic Throughput Process
P24	PROCESS HEATER	Raw Material Heater - Tower A & B	Boiler/Furnace
--> 01	GENERIC	Combustion of fuels at atmospheric pressure	Generic Throughput Process
P24A	GENERIC	Dust Emissions from Towers A and B	Miscellaneous
--> 01	GENERIC	Sand Heating	Generic Throughput Process
P51	GENERIC	Batch and Continuous Mixers - Tower A and B	Miscellaneous
--> 00	GENERIC	Batch & Continuous Mixers (Tower Vents)	Generic Throughput Process
--> 01	GENERIC	Batch & Continuous Mixers (Scrubber)	Generic Throughput Process

2012 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

EMISSION FLOW SUMMARY

F11-01 (100%) --> OUT

F61-01 (100%) --> OUT

P14-00 (100%) --> C14-00 (100%) --> S14-00 (100%) --> OUT

P16-00 (100%) --> C20-00 (100%) --> S20-00 (100%) --> OUT

P24-01 (100%) --> C19-01 (100%) --> C20-00 (100%) --> S20-00 (100%) --> OUT

P24A-01 (100%) --> C19-01 (100%) --> C20-00 (100%) --> S20-00 (100%) --> OUT

P51-00 (100%) --> OUT

P51-01 (100%) --> C50-00 (100%) --> S50-00 (100%) --> OUT

2012 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

DEVICES/PROCESSES DETAILS

C14**Baghouse/Fabric Filter****Baghouse****DEVICE DESC:** Panel Filter**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** This baghouse is the control device for all raw silos and includes C14, C15, C22, C114, C115.**--CTRL EFFIC--**

<u>POLLUTANT</u>	<u>VALUE</u>
PM10	90%
PM	90%

C14, Process 00**Used for collectors****PROCESS NAME:** Raw Silo Bin Filters - Tower
A & B**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

301 Dys/Yr

QTRLY SCHEDULE: Q1: 27%

Q2: 26%

Q3: 32%

Q4: 15%

--INCOMING STREAMS--

P14-00 (100%) --> C14-00

--OUTGOING STREAMS--C14-00 (100%) --> S14-00
(100%) --> OUT

2012 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

C19 Cyclone/Settling Chambers Cyclone**DEVICE DESC:** Cyclone - Tower A and B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** Includes C19 and C119**--CTRL EFFIC--**

<u>POLLUTANT</u>	<u>VALUE</u>
PM10	90%
PM	90%

C19, Process 01 Used for collectors**PROCESS NAME:****PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

301 Dys/Yr

QTRLY SCHEDULE: Q1: 27%

Q2: 26%

Q3: 32%

Q4: 15%

--INCOMING STREAMS--

P24-01 (100%) --> C19-01

P24A-01 (100%) --> C19-01

--OUTGOING STREAMS--

C19-01 (100%) --> C20-00

(100%) --> S20-00 (100%) -->

OUT

C20 Baghouse/Fabric Filter Baghouse**DEVICE DESC:** Baghouse - Tower A and B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** Includes C20 and C120**--CTRL EFFIC--**

<u>POLLUTANT</u>	<u>VALUE</u>
PM10	99.7%
PM	99.7%

C20, Process 00 Used for collectors**PROCESS NAME:** Baghouse**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

301 Dys/Yr

QTRLY SCHEDULE: Q1: 27%

Q2: 26%

Q3: 32%

Q4: 15%

--INCOMING STREAMS--

P16-00 (100%) --> C20-00

C19-01 (100%) --> C20-00

--OUTGOING STREAMS--

C20-00 (100%) --> S20-00

(100%) --> OUT

2012 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

C50 Wet Collection Systems Scrubber

DEVICE DESC: Wet Scrubber - Tower A & B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** This scrubber includes C50 and C150.**--CTRL EFFIC--**

<u>POLLUTANT</u>	<u>VALUE</u>
PM10	71%
PHENOL	54.5%
PM	71%
ROG	64%
AMMONIA	0%

C50, Process 00 Used for collectors**PROCESS NAME:** Wet Scrubber**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

301 Dys/Yr

QTRLY SCHEDULE: Q1: 27%

Q2: 26%

Q3: 32%

Q4: 15%

--INCOMING STREAMS--

P51-01 (100%) --> C50-00

--OUTGOING STREAMS--C50-00 (100%) --> S50-00
(100%) --> OUT

FID: 627005280

DEVICE DESC: Railcar Loading - Tower A and B
CONSTR DATE: 12/01/2005
DEVICE COMMENTS: Includes F61 and F161

MAX TPUT: 240000 LB/HR

F61-01 (100%) --> OUT

2012 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

P14**Miscellaneous Silo****DEVICE DESC:** Raw Silos - Tower A and B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** This device includes emissions from P14, P15, P22, P114, P115. All are raw silos.**P14, Process 00****Generic Throughput Process****PROCESS NAME:** Raw Silos**SCC CODE:** 30502502**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

301 Dys/Yr

QTRLY SCHEDULE: Q1: 27%

Q2: 26%

Q3: 32%

Q4: 15%

ANNUAL TPUT: 189409.65 TONof PRODUCT -
MINERALS**AVG TPUT:** 26.2195 TON/HR**MAX TPUT:** 100 TON/HR**--EMISSION FACTORS--**

<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>
PM	.000615 LB / TON	AP42
PM10	.000291 LB / TON	AP42

--EMISSIONS / YR--

<u>POLLUTANT</u>	<u>NR438_THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
PM (c)	10000 LB	116.487 LB	11.649 LB	
PM10 (c)	10000 LB	55.118 LB	5.512 LB	

--INCOMING STREAMS--

TPUT --> P14-00

--OUTGOING STREAMS--

P14-00 (100%) --> C14-00
 (100%) --> S14-00 (100%) -->
 OUT

2012 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

P16**Miscellaneous Conveyor****DEVICE DESC:** Conveyors - Tower A & B**CONSTR DATE:** 12/01/2005

DEVICE COMMENTS: This device includes closed loop devices of P13, P16, P17, P48, P21, P23, P27, P28, P29, P41, P42, P43, P44, P45, P46, P47, P49, P71, P113, P116, P117, P121, P122, P127, P128, P129, P141, P142, P143, P144, P145, P146, P147, P148, P161, and P163.

P16, Process 00**Generic Throughput Process****PROCESS NAME:** Conveyors**SCC CODE:** 30502503**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

301 Dys/Yr

QTRLY SCHEDULE: Q1: 27%

Q2: 26%

Q3: 32%

Q4: 15%

ANNUAL TPUT: 194838.09 TON

of PRODUCT - MINERALS

AVG TPUT: 26.97094 TON/HR**MAX TPUT:** 200 TON/HR**--EMISSION FACTORS--**

<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>
PM	0 LB / TON	OTHR
PM10	0 LB / TON	OTHR

--EMISSIONS / YR--

<u>POLLUTANT</u>	<u>NR438 THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
PM (r)	10000 LB	2,863.000 LB	2,863.000 LB	
PM10 (r)	10000 LB	2,863.000 LB	2,863.000 LB	

--INCOMING STREAMS--

TPUT --> P16-00

--OUTGOING STREAMS--

P16-00 (100%) --> C20-00
 (100%) --> S20-00 (100%) -->
 OUT

P24**Boiler/Furnace Process Heater****DEVICE DESC:** Raw Material Heater - Tower A & B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** This device includes P24 and P123**MAX RATED CAPACITY:** MMBTU/HR**P24, Process 01****Generic Throughput Process****PROCESS NAME:** Combustion of fuels at atmospheric pressure**SCC CODE:** 10200602**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

301 Dys/Yr

QTRLY SCHEDULE: Q1: 27%

Q2: 26%

Q3: 32%

Q4: 15%

ANNUAL TPUT: 49.717 MMBTU

of Natural Gas

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AVG TPUT: 6.8822 E3 FT3/H

MAX TPUT: 20 E3 FT3/H

--EMISSION FACTORS--

<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>
AMMONIA	3.2 LB / MMCF	EPA
ARSENIC	.0002 LB / MMCF	EPA
BARIUM	.0044 LB / MMCF	EPA
BENZ(A)ANTHR	.0000018 LB / MMCF	EPA
BENZENE	.0021 LB / MMCF	EPA
BENZO(A)PHEN	.0000018 LB / MMCF	EPA
BENZO(A)PYRE	.0000012 LB / MMCF	EPA
BENZO(B)FLUO	.0000018 LB / MMCF	EPA
BENZO(JK)FLE	.0000003 LB / MMCF	EPA
BENZO(K)FLUO	.0000018 LB / MMCF	EPA
BERYLLIUM	.000012 LB / MMCF	EPA
CADMIUM	.0011 LB / MMCF	EPA
CHROMIUM MET	.0014 LB / MMCF	EPA
CO	84 LB / MMCF	EPA
CO2	120000 LB / MMCF	EPA
COBALT	.000084 LB / MMCF	EPA
COPPER	.00085 LB / MMCF	EPA
DIBENZAHAN	.0000012 LB / MMCF	EPA
FORMALDEHYDE	.075 LB / MMCF	EPA
HEXANE	1.8 LB / MMCF	EPA
INDN(123CDPY	.0000018 LB / MMCF	EPA
LEAD CMP	.0005 LB / MMCF	EPA
MANGANESE	.00038 LB / MMCF	EPA
MERCURY ALL	.00026 LB / MMCF	EPA
METHANE	2.3 LB / MMCF	EPA
MOLYBDENUM	.0011 LB / MMCF	EPA
NAPHTHALENE	.00061 LB / MMCF	EPA
NICKEL CMP	.0021 LB / MMCF	EPA
NITROUSOXIDE	2.2 LB / MMCF	EPA
NOX	100 LB / MMCF	EPA
PM	8.6 LB / MMCF	EPA
PM10	8.6 LB / MMCF	EPA
ROG	5.5 LB / MMCF	EPA
SELENIUM	.000024 LB / MMCF	EPA
SO2	.6 LB / MMCF	EPA
TOLUENE	.0034 LB / MMCF	EPA
VANADIUM	.0023 LB / MMCF	EPA

--EMISSIONS / YR--

<u>POLLUTANT</u>	<u>NR438_THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
CO (c)	10000 LB	4,176.228 LB	4,176.228 LB	
NOX (c)	10000 LB	4,971.700 LB	4,971.700 LB	17.483 LB
PM (c)	10000 LB	427.566 LB	.128 LB	
PM10 (c)	10000 LB	427.566 LB	.128 LB	
ROG (c)	6000 LB	273.444 LB	273.444 LB	.962 LB
SO2 (c)	10000 LB	29.830 LB	29.830 LB	
AMMONIA (c) (s)	4097 LB	159.094 LB	159.094 LB	
ARSENIC (c) (fs)	.21 LB	.010 LB	.010 LB	
BARIUM (c) (s)	118 LB	.219 LB	.219 LB	
BENZ(A)ANTHR (c) (s)	8.08 LB	.000 LB	.000 LB	
BENZENE (c) (fs)	114 LB	.104 LB	.104 LB	
BENZO(A)PHEN (c)	12 LB	.000 LB	.000 LB	
BENZO(A)PYRE (c) (s)	.81 LB	.000 LB	.000 LB	
BENZO(B)FLUO (c) (s)	1.22 LB	.000 LB	.000 LB	
BENZO(JK)FLE (c)	12 LB	.000 LB	.000 LB	
BENZO(K)FLUO (c) (s)	1.22 LB	.000 LB	.000 LB	

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BERYLLIUM (c) (fs)	.37 LB	.001 LB	.001 LB
CADMIUM (c) (fs)	.49 LB	.055 LB	.055 LB
CHROMIUM MET (c) (fs)	118 LB	.070 LB	.070 LB
CO2 (c)	200000000 LB	5,966,040.000 LB	5,966,040.000 LB
COBALT (c) (fs)	4.71 LB	.004 LB	.004 LB
COPPER (c) (s)	235 LB	.042 LB	.042 LB
DIBENZAHAN (c) (s)	.74 LB	.000 LB	.000 LB
FORMALDEHYDE (c)	68.3 LB	3.729 LB	3.729 LB
(fs)			
HEXANE (c) (fs)	6000 LB	89.491 LB	89.491 LB
INDN(123CDPY (c) (s)	8.08 LB	.000 LB	.000 LB
LEAD CMP (c) (f)	400 LB	.025 LB	.025 LB
MANGANESE (c) (fs)	47.1 LB	.019 LB	.019 LB
MERCURY ALL (c) (fs)	5.88 LB	.013 LB	.013 LB
METHANE (c)	10000000 LB	114.349 LB	114.349 LB
MOLYBDENUM (c) (s)	1176 LB	.055 LB	.055 LB
NAPHTHALENE (c) (fs)	6000 LB	.030 LB	.030 LB
NICKEL CMP (c) (fs)	3.42 LB	.104 LB	.104 LB
NITROUSOXIDE (c) (s)	6000 LB	109.377 LB	109.377 LB
SELENIUM (c) (fs)	47.1 LB	.001 LB	.001 LB
TOLUENE (c) (fs)	6000 LB	.169 LB	.169 LB
VANADIUM (c) (s)	11.8 LB	.114 LB	.114 LB

--INCOMING STREAMS--

TPUT --> P24-01

--OUTGOING STREAMS--

P24-01 (100%) --> C19-01

(100%) --> C20-00 (100%) -->

S20-00 (100%) --> OUT

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P24A**Miscellaneous****Any Device****DEVICE DESC:** Dust Emissions from Towers A and B**CONSTR DATE:****DEVICE COMMENTS:** Includes P24A and P123A**P24A, Process 01****Generic Throughput
Process****PROCESS NAME:** Sand Heating**SCC CODE:** 30502720**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

301 Dys/Yr

QTRLY SCHEDULE: Q1: 27%

Q2: 26%

Q3: 32%

Q4: 15%

ANNUAL TPUT: 189409.65 TONof PRODUCT -
MINERALS**AVG TPUT:** 26.2195 TON/HR**MAX TPUT:** 40 TON/HR**--EMISSION FACTORS--**

<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>
NOX	0 LB / TON	EPA
PM	.029 LB / TON	DNR
PM10	.0064 LB / TON	DNR

--EMISSIONS / YR--

<u>POLLUTANT</u>	<u>NR438_THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
PM (c)	10000 LB	5,492.880 LB	1.648 LB	
PM10 (c)	10000 LB	1,212.222 LB	.364 LB	

--INCOMING STREAMS--

TPUT --> P24A-01

--OUTGOING STREAMS--

P24A-01 (100%) --> C19-01
 (100%) --> C20-00 (100%) -->
 S20-00 (100%) --> OUT

P51**Miscellaneous****Any Device****DEVICE DESC:** Batch and Continuous Mixers - Tower A and B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** Includes P51, P151, P52, P152 for reporting purposes.**P51, Process 00****Generic Throughput
Process****PROCESS NAME:** Batch & Continuous Mixers
(Tower Vents)**SCC CODE:** 30100101

PROCESS COMMENTS: Process accounts for
 "secondary" emission of
 NH3 initially controlled by
 C50, but then volatilizes from
 a scrubber water tank
 w/increasing pH. Resulting
 fugitive indoor emissions
 exhaust via roof vent

SCHEDULE: 24 Hrs/Day

7 Dys/Wk

301 Dys/Yr

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QTRLY SCHEDULE: Q1: 27%
ANNUAL TPUT: 14513 LB

Q2: 26%
of PRODUCT -
CHEMICAL

Q3: 32%**Q4:** 15%

AVG TPUT: 2.009 LB/HR
MAX TPUT: 8 LB/HR

--EMISSION FACTORS--

<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>
AMMONIA	1 LB / LB	MBAL
CO	0 LB / TON	EPA
PHENOL	0 LB / TON	EPA
ROG	0 LB / TON	EPA

--EMISSIONS / YR--

<u>POLLUTANT</u>	<u>NR438 THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
AMMONIA (c) (s)	4097 LB	14,513.000 LB	14,513.000 LB	

--INCOMING STREAMS--

TPUT --> P51-00

--OUTGOING STREAMS--

P51-00 (100%) --> OUT

P51, Process 01**Generic Throughput
Process**

PROCESS NAME: Batch & Continuous Mixers
(Scrubber)

SCC CODE: 30502506**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

301 Dys/Yr

QTRLY SCHEDULE: Q1: 27%**Q2:** 26%**Q3:** 32%**Q4:** 15%**ANNUAL TPUT:** 389676182 LBof PRODUCT -
MINERALS**AVG TPUT:** 53941.88566 LB/HR**MAX TPUT:** 75000 LB/HR**--EMISSION FACTORS--**

<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>
AMMONIA	1.06762 LB / TON	STK
PHENOL	.241 LB / TON	STK
PM	.271 LB / TON	STK
PM10	.271 LB / TON	STK
ROG	.241 LB / TON	STK

--EMISSIONS / YR--

<u>POLLUTANT</u>	<u>NR438 THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
PM (c)	10000 LB	52,801.123 LB	15,312.326 LB	
PM10 (c)	10000 LB	52,801.123 LB	15,312.326 LB	
ROG (c)	6000 LB	46,955.980 LB	16,904.153 LB	
AMMONIA (c) (s)	4097 LB	208,013.043 LB	208,013.043 LB	59.443 LB
PHENOL (c) (fs)	4528 LB	46,955.980 LB	21,364.971 LB	

--INCOMING STREAMS--

TPUT --> P51-01

--OUTGOING STREAMS--

P51-01 (100%) --> C50-00
(100%) --> S50-00 (100%) -->
OUT

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S14**Stack Stack**

DEVICE DESC: S14 is the discharge stack for all raw silos and includes S14, S15, S22, S114, and S115

CONSTR DATE: 12/01/2005

DEVICE COMMENTS:

STACK HEIGHT: 18.9 m

or 62.01 ft

STACK DIAMETER: .05 m

or .16 ft

STACK TEMP: 293 K

or 67.73 F

STACK VELOCITY: .01 m/s

or .03 ft/s

S14, Process 00

Releasing/Discharging material to the atmosphere

PROCESS NAME: Raw Silos Discharge Stack
- Tower A & B

PROCESS COMMENTS:

SCHEDULE: 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 24%

Q2: 22%

Q3: 27%

Q4: 27%

--INCOMING STREAMS--

C14-00 (100%) --> S14-00

--OUTGOING STREAMS--

S14-00 (100%) --> OUT

S150**Stack Stack**

DEVICE DESC: Wet Scrubber Discharge Stack- Tower B

CONSTR DATE: 04/25/2007

DEVICE COMMENTS:

STACK HEIGHT: 22.9 m

or 75.13 ft

STACK DIAMETER: .61 m

or 2 ft

STACK TEMP: 293 K

or 67.73 F

STACK VELOCITY: 9.7 m/s

or 31.82 ft/s

S150, Process 01

Releasing/Discharging material to the atmosphere

PROCESS NAME: Stack for P151-153

PROCESS COMMENTS:

SCHEDULE: 24 Hrs/Day

6 Dys/Wk

315 Dys/Yr

QTRLY SCHEDULE: Q1: 24%

Q2: 22%

Q3: 26%

Q4: 28%

--OUTGOING STREAMS--

S150-01 (100%) --> OUT

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S20**Stack****Stack****DEVICE DESC:** Baghouse Discharge Stack - Tower A & B. Includes S120.**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:****STACK HEIGHT:** 4.9 m

or 16.08 ft

STACK DIAMETER: .76 m

or 2.49 ft

STACK TEMP: 293 K

or 67.73 F

STACK VELOCITY: 11.9 m/s

or 39.04 ft/s

S20, Process 00**Releasing/Discharging
material to the
atmosphere****PROCESS NAME:** Baghouse Discharge Stack
- Tower A & B**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 24%

Q2: 22%

Q3: 27%

Q4: 27%

--INCOMING STREAMS--

C20-00 (100%) --> S20-00

--OUTGOING STREAMS--

S20-00 (100%) --> OUT

S50**Stack****Stack****DEVICE DESC:** Wet Scrubber Discharge Stack - Tower A.**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:****STACK HEIGHT:** 25.6 m

or 83.99 ft

STACK DIAMETER: .61 m

or 2 ft

STACK TEMP: 293 K

or 67.73 F

STACK VELOCITY: 9.7 m/s

or 31.82 ft/s

S50, Process 00**Releasing/Discharging
material to the
atmosphere****PROCESS NAME:** Wet Scrubber Discharge
Stack - Tower A & B**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 24%

Q2: 22%

Q3: 27%

Q4: 27%

--INCOMING STREAMS--

C50-00 (100%) --> S50-00

--OUTGOING STREAMS--

S50-00 (100%) --> OUT

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FACILITY EMISSIONS SUMMARY

-2012 SUMMARY-	--2012--	--2012--	--2012--	--2012--
<u>--POLLUTANT--</u>	<u>--NR438_THRESH--</u>	<u>--UNCNTRLD/YR--</u>	<u>--CNTRLD/YR--</u>	<u>--OZONE/DY--</u>
CO	10000 LB	4,176.22800 LB	4,176.22800 LB	
NOX	10000 LB	4,971.70000 LB	4,971.70000 LB	17.48290 LB
PM	10000 LB	62,839.20570 LB	19,326.90045 LB	
PM10	10000 LB	57,776.35052 LB	18,598.65102 LB	
ROG	6000 LB	47,229.42343 LB	17,177.59627 LB	60.40473 LB
SO2	10000 LB	29.83020 LB	29.83020 LB	
AMMONIA (s)	4097 LB	222,685.13711 LB	222,685.13711 LB	
ARSENIC (fs)	.21 LB	.00994 LB	.00994 LB	
BARIUM (s)	118 LB	.21875 LB	.21875 LB	
BENZ(A)ANTHR (s)	8.08 LB	.00009 LB	.00009 LB	
BENZENE (fs)	114 LB	.10441 LB	.10441 LB	
BENZO(A)PHEN	12 LB	.00009 LB	.00009 LB	
BENZO(A)PYRE	.81 LB	.00006 LB	.00006 LB	
(s)				
BENZO(B)FLUO (s)	1.22 LB	.00009 LB	.00009 LB	
BENZO(JK)FLE	12 LB	.00015 LB	.00015 LB	
BENZO(K)FLUO (s)	1.22 LB	.00009 LB	.00009 LB	
BERYLLIUM (fs)	.37 LB	.00060 LB	.00060 LB	
CADMIUM (fs)	.49 LB	.05469 LB	.05469 LB	
CHROMIUM MET	118 LB	.06960 LB	.06960 LB	
(fs)				
CO2	200000000 LB	5,966,040.00000 LB	5,966,040.00000 LB	
COBALT (fs)	4.71 LB	.00418 LB	.00418 LB	
COPPER (s)	235 LB	.04226 LB	.04226 LB	
DIBENZAHAH (s)	.74 LB	.00006 LB	.00006 LB	
FORMALDEHYDE	68.3 LB	3.72878 LB	3.72878 LB	
(fs)				
HEXANE (fs)	6000 LB	89.49060 LB	89.49060 LB	
INDN(123CDPY (s)	8.08 LB	.00009 LB	.00009 LB	
LEAD CMP (f)	400 LB	.02486 LB	.02486 LB	
MANGANESE (fs)	47.1 LB	.01889 LB	.01889 LB	
MERCURY ALL (fs)	5.88 LB	.01293 LB	.01293 LB	
METHANE	10000000 LB	114.34910 LB	114.34910 LB	
MOLYBDENUM (s)	1176 LB	.05469 LB	.05469 LB	
NAPHTHALENE	6000 LB	.03033 LB	.03033 LB	
(fs)				
NICKEL CMP (fs)	3.42 LB	.10441 LB	.10441 LB	
NITROUSOXIDE	6000 LB	109.37740 LB	109.37740 LB	
(s)				
PHENOL (fs)	4528 LB	46,955.97993 LB	21,364.97087 LB	
SELENIUM (fs)	47.1 LB	.00119 LB	.00119 LB	
TOLUENE (fs)	6000 LB	.16904 LB	.16904 LB	
VANADIUM (s)	11.8 LB	.11435 LB	.11435 LB	
-2011 SUMMARY-	--2011--	--2011--	--2011--	--2011--
<u>--POLLUTANT--</u>	<u>--NR438_THRESH--</u>	<u>--UNCNTRLD/YR--</u>	<u>--CNTRLD/YR--</u>	<u>--OZONE/DY--</u>
CO	10000 LB	4,176.48000 LB	4,176.48000 LB	
NOX	10000 LB	13,101.99800 LB	13,101.99800 LB	35.99450 LB

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PM	10000 LB	85,878.85901 LB	26,076.96034 LB	
PM10	10000 LB	78,858.77049 LB	25,058.59894 LB	
ROG	6000 LB	64,936.85601 LB	23,552.28256 LB	64.70407 LB
SO2	10000 LB	29.83200 LB	29.83200 LB	
AMMONIA(S)	4097 LB	265,165.57064 LB	265,165.57064 LB	
ARSENIC(FS)	.21 LB	.00994 LB	.00994 LB	
BARIUM(S)	118 LB	.21877 LB	.21877 LB	
BENZ(A)ANTHR(S)	8.08 LB	.00009 LB	.00009 LB	
BENZENE(FS)	114 LB	.10441 LB	.10441 LB	
BENZO(A)PHEN	12 LB	.00009 LB	.00009 LB	
BENZO(A)PYRE(S)	.81 LB	.00006 LB	.00006 LB	
BENZO(B)FLUO(S)	1.22 LB	.00009 LB	.00009 LB	
BENZO(JK)FLE	12 LB	.00015 LB	.00015 LB	
BENZO(K)FLUO(S)	1.22 LB	.00009 LB	.00009 LB	
BERYLLIUM(FS)	.37 LB	.00060 LB	.00060 LB	
CADMIUM(FS)	.49 LB	.05469 LB	.05469 LB	
CHROMIUM MET (FS)	118 LB	.06961 LB	.06961 LB	
CO2	200000000 LB	5,966,400.00000 LB	5,966,400.00000 LB	
COBALT(FS)	4.71 LB	.00418 LB	.00418 LB	
COPPER(S)	235 LB	.04226 LB	.04226 LB	
DIBENZAHA(S)	.74 LB	.00006 LB	.00006 LB	
FORMALDEHYDE (FS)	68.3 LB	3.72900 LB	3.72900 LB	
HEXANE(FS)	6000 LB	89.49600 LB	89.49600 LB	
INDN(123CDPY(S)	8.08 LB	.00009 LB	.00009 LB	
LEAD CMP(F)	400 LB	.02486 LB	.02486 LB	
MANGANESE(FS)	47.1 LB	.01889 LB	.01889 LB	
MERCURY ALL (FS)	5.88 LB	.01293 LB	.01293 LB	
METHANE	10000000 LB	114.35600 LB	114.35600 LB	
MOLYBDENUM(S)	1176 LB	.05469 LB	.05469 LB	
NAPHTHALENE (FS)	6000 LB	.03033 LB	.03033 LB	
NICKEL CMP(FS)	3.42 LB	.10441 LB	.10441 LB	
NITROUSOXIDE (S)	6000 LB	109.38400 LB	109.38400 LB	
PHENOL(FS)	4528 LB	64,663.39601 LB	29,421.84518 LB	
SELENIUM(FS)	47.1 LB	.00119 LB	.00119 LB	
TOLUENE(FS)	6000 LB	.16905 LB	.16905 LB	
VANADIUM(S)	11.8 LB	.11436 LB	.11436 LB	

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REPORT LEGEND

--EMISSIONS--

c = Calculated; r = Reported

f = Federal Hap; s = State Hap; fs = Fed and State Hap